

32 Sub 11. (Twice Amended) An apparatus according to Claim 1, wherein said equipment comprises one of an exposure equipment, an inspection equipment and a measuring equipment.

18. (Not Amended) An apparatus according to Claim 1, wherein the semiconductor manufacturing equipment is a semiconductor exposure apparatus.

19. (Not Amended) An apparatus according to Claim 11, wherein the inspection equipment is a mask inspection equipment.

20. (Not Amended) An apparatus according to Claim 11, wherein the measuring equipment is a laser interferometer.

REMARKS

Claims 1, 2 and 4-9, 11 and 18-20 are presented for consideration, with Claim 1 being independent.

Independent Claim 1 has been amended to further distinguish Applicant's invention from the cited art. Claim 11 has also been amended, and Claim 3 has been cancelled.

Initially, Applicant is submitting concurrently herewith a Request to Make Drawing Changes with proposed changes to Figure 1. As shown, the proposed changes locate the semiconductor manufacturing equipment, the inspection equipment and the measuring equipment within chamber 1. Approval of the drawing corrections by the Examiner is respectfully requested.

Claims 1-5, 7, 8, 11 and 18-20 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Endo '816. Claim 9 was rejected under 35 U.S.C. §103 as allegedly being obvious over Endo. In addition, Claims 1-9, 11 and 18-20 were rejected as allegedly being obvious over Crawford '878. These rejections are respectfully traversed.

Applicant's invention as set forth in Claim 1 relates to an apparatus comprised of chamber enclosing equipment, and an air conditioner for controlling a supply of air supplied into the chamber. The air conditioner includes a refrigerator using a refrigerant, a first heat exchanger for exchanging heat between the refrigerant and a coolant, a second heat exchanger for exchanging heat between the coolant and the supply of air, and an electric heater for heating the supply of air at a predetermined temperature. The refrigerant is circulated between the refrigerator and the first heat exchanger, and the coolant comprises a liquid and is circulated between the first and second heat exchangers.

In accordance with Applicant's claimed invention, by providing first and second heat exchangers and an electric heater, an efficient and high-performance air conditioner is provided for controlling the supply of air into the chamber.

Endo provides a temperature control system for an exposure apparatus in which a common refrigerant is used to cool both air and liquid. As shown in the figure, the temperature control system 4 uses a liquid medium to control the temperature of a projection lens, and a temperature control system 3 uses air to control the temperature of chamber 2. The Office Action asserts that cooler 20 is a first heat exchanger, and coolers 8 or 14 comprise a

second heat exchanger. It is respectfully submitted, however, that the coolers 8 or 14 do not comprise a second heat exchanger as set forth in Applicant's claimed invention. In Applicant's Claim 1 the second heat exchanger exchanges heat between a coolant and a supply of air. Endo is also not understood to provide a refrigerant circulating between the refrigerator and the first heat exchanger, and a liquid coolant circulating between the first and second heat exchangers.

Accordingly, reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. §102 and §103 in view of Endo is respectfully requested.

The air conditioning system in Crawford uses an air conditioning unit provided in a space 7 for supplying air to a room 6. The Office Action asserts that Crawford includes a refrigerator, a first heat exchanger 33 and a second heat exchanger (reheating coils 45 or refrigeration coils 26). It is respectfully submitted, however, that Crawford does not teach or suggest, among other features, an electric heater for heating the supply of air at a predetermined temperature as recited in Claim 1 of Applicant's invention.

Accordingly, reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. §103 in view of Crawford is respectfully requested.

Therefore, it is submitted that Applicant's invention as set forth in independent Claim 1 is patentable over the cited art. In addition, dependent Claims 2, 4-9, 11 and 18-20 set forth additional features of Applicant's invention. Independent consideration of the dependent claims is respectfully requested.

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C.
office by telephone at (202) 530-1010. All correspondence should continue to be directed to our
below-listed address.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Twice Amended) An apparatus, comprising:
a chamber enclosing [semiconductor manufacturing] equipment; and
an air conditioner for controlling a supply of air [which is] supplied into
said chamber, said air conditioner including (i) a refrigerator using a refrigerant, (ii) a first heat
exchanger for exchanging heat between the refrigerant and a coolant, [and] (iii) a second heat
exchanger for exchanging heat between the coolant and the supply of air [which is] supplied into
said chamber, and (iv) an electric heater for heating the supply of air at a predetermined
temperature, wherein

the refrigerant is circulated between said refrigerator and said first heat
exchanger, and [said] wherein the coolant comprises a liquid and is circulated between said first
and second heat exchangers.

3. Cancelled.

11. (Twice Amended) An apparatus according to Claim 1, [further
comprising] wherein said equipment [selected from the group consisting of an inspection]
comprises one of an exposure equipment, an inspection equipment and a measuring equipment[,
disposed inside said chamber].

Approved.
LVC
5-8-02

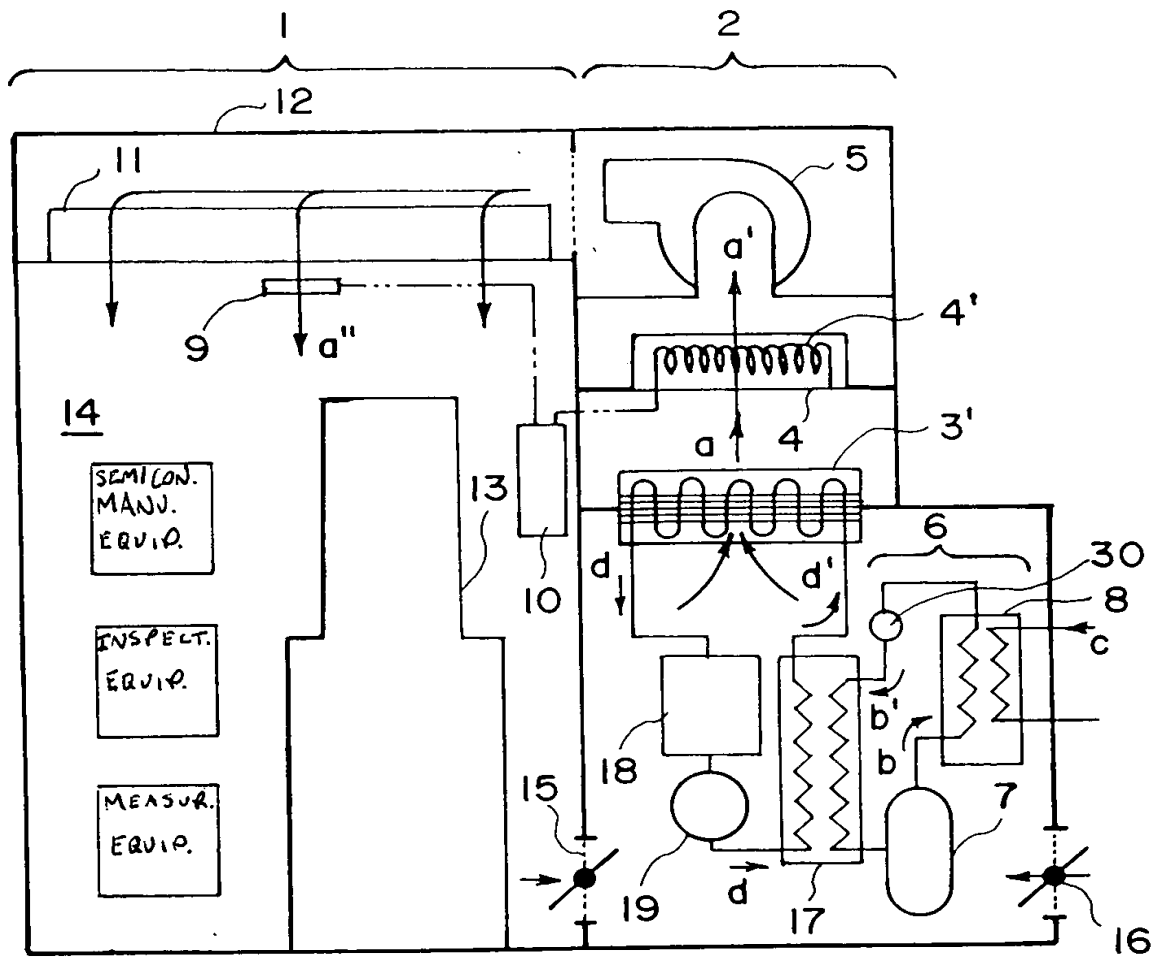


FIG. 1